and lithographic branch of the Survey Office, who took immense interest and pains in the work, may well be proud. This method of grading, being once accomplished, is available for any future maps, so that for next year's map the work will be trivial as compared with this first one. The map consists of the new map of Victoria, combined with the south part of New South Wales and the west part of South Australia, upon which is printed in blue colour nine grades or tones, each grade being confined within certain irregular curved outlines or boundaries, forming a somewhat arbitrary limit to the areas, over which the rainfall was 5 to 10, 10 to 15, 15 to 20, and so on up to 50 or more, inches per annum. It must be remembered that these curved outlines have been put in with a somewhat free hand, and they must not be taken as strictly representing a margin beyond which the rainfall is 5 in. more or less than within it. Nevertheless, as the contour of the country, some topographical knowledge, as well as rain-gauge statistics, have been taken into account in tracing them, they may confidently be assumed as sufficiently near for all practical purposes. There are two or three prominent facts displayed by this map:-1. That the greatest rainfall takes place on the coast lines or on the summits of the high ranges, especially near the coast. That the areas immediately in the lee of these ranges have a markedly lessened rainfall. 3. That, were it not for the mountain ranges, it appears probable the amount of rainfall in the southern and eastern portions of Australia would decrease gradually from the coast line to the central regions of the continent. It is proposed to issue a similar map every year; and I hope the one for the current year will be ready by February. It would be very interesting to have a map showing the average rainfall for many years, but the materials available for one to show an average five years are, I fear, as yet somewhat too meagre.

ART. XIX.—The Return of the Pons Comet.

BY MR. ELLERY, F.R.S.

[Oral communication 15th November, 1883.]